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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/761,283	01/16/2001	Chao-Hsin Chang	67,200-355	5574

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TUNG & ASSOCIATES  
Suite 120  
838 W. Long Lake Road  
Bloomfield Hills, MI 48302

EXAMINER

DASS, HARISH T

ART UNIT PAPER NUMBER

3628

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/761,283

Applicant(s)

CHANG, CHAO-HSIN

Examiner

Harish T Dass

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/16/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1 and 9 are objected to because of the following informalities: Claims have type error, for example: claim 1 line 15 "the at". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of

whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is

presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. In *re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in

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State Street (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the Toma test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, Claims 1-8 have no connection to the technological arts. None of the steps indicate any connection to a computer or technology. Therefore, the claims are directed towards non-statutory subject matter. To overcome this rejection the Examiner recommends that Applicant amend the claims to better clarify which of the steps are being performed within the technological arts; for example: "computer is used to calculate average ..."

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al (hereinafter Johnson – US 6,047,274) in view of McCausland, May 24, 1993 "ADM seeking foundry to fill 2-year 486 gap".

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Re. Claims 1 and 9 Applicant admits (specification page 3 line 15 to page 4 line 8) that Johnson discloses a method and a system for enhancing competition within a group of energy suppliers (power generator) such in turn as to provide for more cost competitive energy costs to a group of energy consumers whose energy needs may be supplied by the group of energy suppliers and further auctioning excess capacity [see entire Johnson's document].

providing a facility having available production capacity for producing at least product (power generator, electric power) [see Abstract C3 L30-L37; C5 L27-L34], allocating from the producing the least one product a first capacity for producing least one specified product (producing gas/electricity) [C1 L8-L26], auctioning, while employing auction method, the least one specified product pool of bidders comprising least one bidder [Abstract; Figures 4, 6-7; C5 L55 to C7 L52; C9 L15-L25], determining from the pool bidders comprising at least one bidder at least one winning bidder [C10 L14-L50], and at least one winning bidder, quantity least one specified product from the manufacturing facility while employing the first capacity for producing the at least specified product [Abstract; C1 L7-L25; C5 L55 to C7 L52]. Johnson does not explicitly disclose fabrication facility having available production capacity. However, McCausland discloses selling or leasing of excess capacity of semiconductor facility to make use of extra capacity. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Johnson and include sell/leasing of fabrication facility excess capacity, as disclosed by McCausland, to generate extra revenue.

Re. Claims 2-5 and 10-13, Johnson discloses supply of power/gas, and McCausland discloses selling/leasing of microelectronics facility and most of bipolar semiconductor production. Johnson or McCausland does not explicitly disclose wherein least one product selected from the group consisting mechanical products, electrical products, chemical products electro-mechanical products, wherein the least one product microelectronic product selected from group consisting integrated ceramic substrate microelectronic fabrications, optoelectronic microelectronic fabrications, sensor image optoelectronic microelectronic fabrications. wherein the first capacity for producing the at least specified product is equal to the total available capacity producing the at least one product, and wherein the first capacity producing less than the total available capacity producing at least product. However, It would have been obvious at the time the invention was made to a person having ordinary skill in the art of facility management to modify the disclosures of Johnson and McCausland and include other manufacturing facilities having extra production capacity for selling/leasing of excess capacities of production facilities to make use of the facility equipment either by selling total or partial capacity as business strategy requires to generate extra revenue.

Claims 6-8 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson and McCausland, as applied to claims 1, 9 above, and further in view of Ausubel (US 5,905,975)



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Re. Claims 6-8 and 14-16, Johnson discloses auctioning of power generator extra capacity, auction, winning bidders, and auction moderator using Internet and communication network [Figures 11-16, C13 L45-L52; C20 L50-L60; C10 L14-L50]. Johnson or McCausland does not explicitly disclose wherein auction is group consisting of English auctions, auctions, reserve auctions, non-reserve auctions, sealed bid auctions and Vickrey auctions. However, Ausubel discloses this feature [see entire document particularly, Abstract; Figure 1; C1 L15 to C5 L40; C14 L20 to C15 L33] to provide computerized system, which allows the flexible bidding by participants. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Johnson, McCausland and include different type of auctions, as taught by Ausubel, to allow bidders to submit not only their current bids, but also to enter future bids into auction system.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 CFR ' 1.111 (c) to consider the references fully when responding to this action.

*Electronic Buyers News, March 27, 1995 "IBM Plans to Invest \$600 Million In Fabs" discloses selling excess capacity of Micro-electronics facility.*

*Burk et al, "DEC to reorganize, sell Alpha Plant Space", computer Reseller News n587 PP3, 187 Jul 18, 1994. discloses selling excess manufacturing capacity of semiconductors.*

*US Pat 6,741,969 to Chen et al, May 25, 2004 "System and method for reducing excess capacity for restaurants and other industries during off-peak or other times" discloses systems and methods for reducing excess capacity for restaurants and other industries during off-peak and other times.*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harish T Dass whose telephone number is 703-305-4694. The examiner can normally be reached on 8:00 AM to 4:50 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S Sough can be reached on 703-308-0505. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harish T Dass  
Examiner  
Art Unit 3628

*Jeffrey PWU for Hyung Sough*

8/16/04

JEFFREY PWU  
PRIMARY EXAMINER